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ANNA'S HUMMINGBIRD

FIG. 4

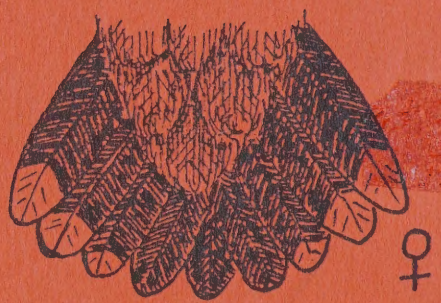

FIG. 5

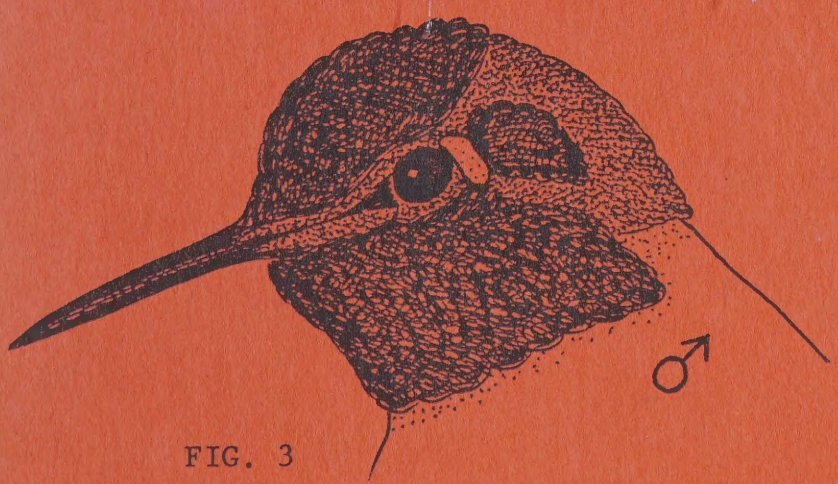

FIG. 3

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COVER STORY: NOTES ON THE FIELD MARKS OF ANNA'S HUMMINGBIRD

by William J. Merilees
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Anna's Hummingbird (*Calypte anna*) has undergone a major range extension in the past ten years (Zimmerman 1973). Since 1971 this species has been recognised as a fairly regular visitor to Alaska (Gibson 1972; Gibson and Byrd 1974, 1975) and now is an uncommon resident in southwestern British Columbia (Whitelaw 1977). The appearance of this species has now been documented for Alberta (Pinel and Riddell 1977; Pinel and Butot 1978). Naturalists in Alberta and other western provinces should be on the lookout for this species. To assist them in identifying the Anna's Hummingbird, the following sketches and observations have been prepared.

When I first noticed this species at our garden feeder I guessed immediately what it was. However when I consulted the field guides I was shocked that my notes and the illustrations in the Peterson (1941) and Golden (Robbins *et al.* 1966) field guides bore little resemblance. It was not until I acquired a copy of the Audubon (Western Region) guide (Udvardy 1977) that the photography by Jack Wilburn suspended my apprehensions.

Aside from the red throat and forehead, I noted a distinct white spot behind the eye, a distinct lighter streak descending obliquely away from the eye, and I noted the red gorget to be magenta not ruby red. All good photos I have since located of this species confirm my observation. Neither the illustrations by Peterson (1941) or Singer (in Robbins *et al.* 1966) indicate the presence of the spot and stripe field marks.

During the past six months, one, possibly two, male Anna's Hummingbirds have been at our feeder daily. From these observations and the helpful assistance of Virginia Whitelaw, Dr. and Mrs. I. McTaggart Cowan, the staff of the British Columbia Provincial Museum and photos taken by Enid Lemon and Bruce McDonald, the following sketches have been prepared.

Briefly the Anna's is a green-backed hummingbird, slightly larger than our other summer resident species. The breast appears 'dirty,' particularly in the male. In both sexes the post eye spot and the descending oblique stripe are characteristic (Figs. 1 & 2). In the male, except under good lighting conditions, the three magenta patches (throat, forehead and auricular) appear near black (Fig. 3 - on cover). The amount of magenta on the throat of the female appears to vary (Fig. 4 - on cover). The female alone has large white tips on each of the outer three tail feathers (Fig. 5 - on cover). Juveniles apparently resemble the female except that the throat may be clear.

The male Anna's Hummingbird commonly sings from a perch, usually a branch on the side of a larger tree. The song is a raspy series of squeeks and buzzes repeated frequently. Compared to the other Canadian hummingbirds this behaviour is unique to the Anna's.

Acknowledgements: Figure 3 was prepared from a photograph taken by Enid Lemon in Victoria, B.C. Figures 4 and 5 were adapted from photographs taken by Bruce McDonald in Vancouver.

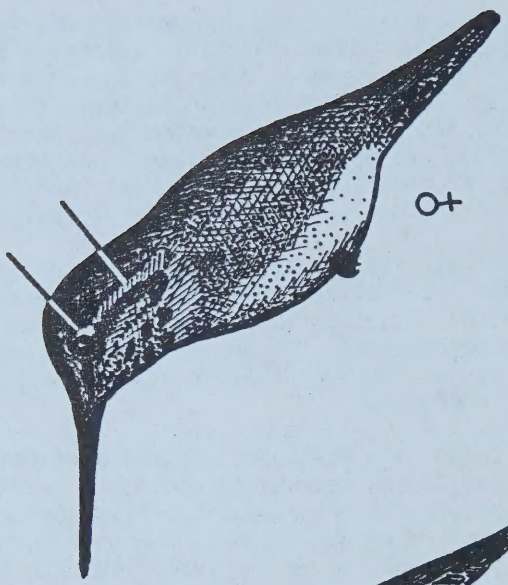

FIG. 2

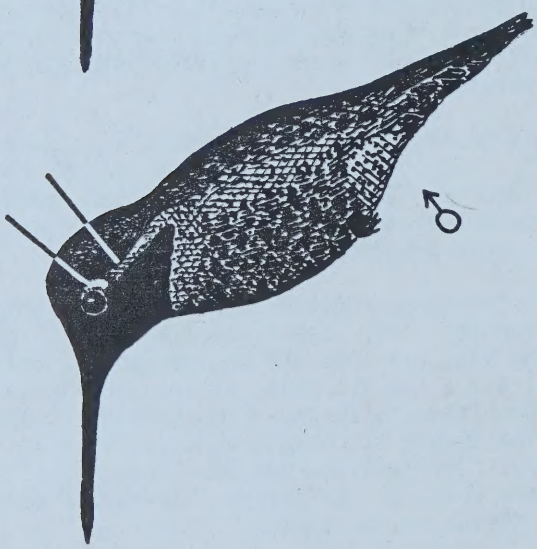

FIG. 1

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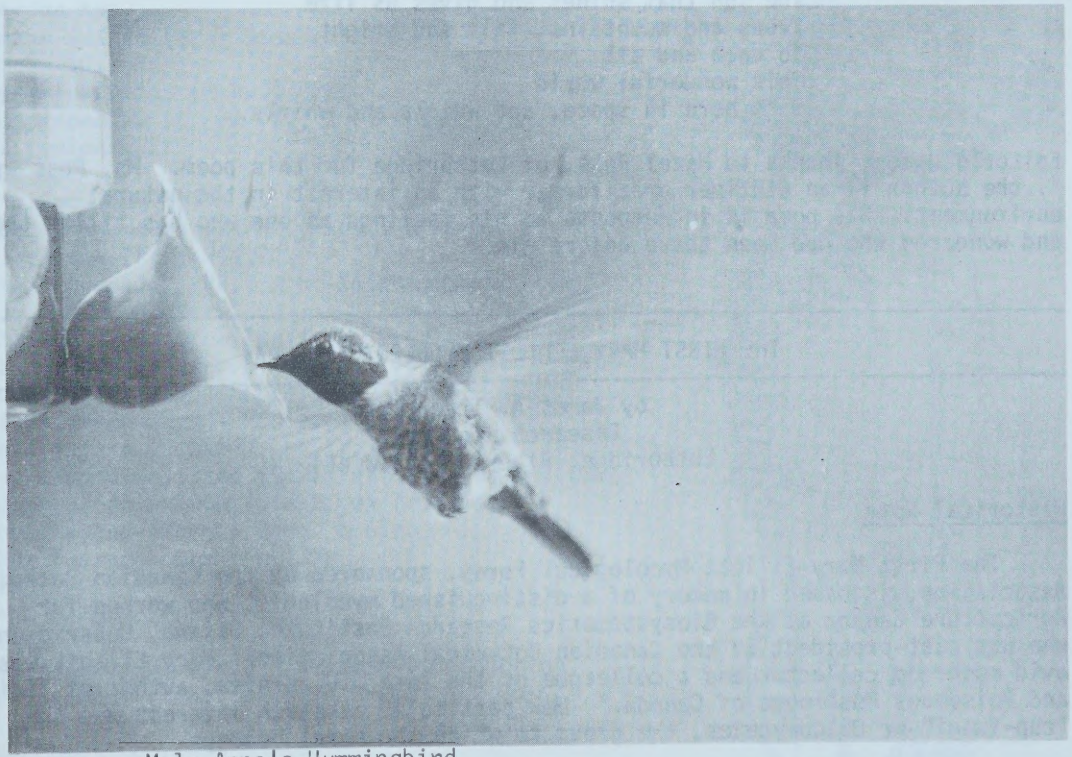

Male Anna's Hummingbird

THIS WORLD OF OURS'

by Elza B. Tudor

Each little thing that grows
A blade of grass
A little bird
The strong and gentle wind that blows

Creation made this world of wonder
Of growing things
And living things
To drive your thoughts assunder

Leaves and flowers, fish and fowl
Trees and animals, big and small
Put here on earth, to see and smell
Cause man alone can feel and tell

To see and feel, each drop of rain
To see the rocks we can't explain
Each little bug, with legs and wings
With the power to think, and do his thing

The sun that shines and gives us life
Trees and mountains, tall and bright
To each and all
This wonderful world
Sets here in space, and whirls and whirls.

Editor's Note: Thanks to Hazel Ross, of Lethbridge for this poem. Ms. Ross writes, "..the author is an oldtimer area farmer with an interest in the natural environment. His poem is in response to his feelings as one who has tilled the soil and wondered who had been there before him."

THE FIRST MARY ELLIOTT MYCOLOGICAL FORAY

by James A. Traquair
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Historical Note

The First Mary Elliott Mycological Foray, sponsored by the Canadian Botanical Association, is named in memory of a distinguished mycologist who worked for Agriculture Canada at the Biosystematics Research Institute, Ottawa, Ontario and who was past-president of the Canadian Botanical Association. Mary Elliott was an avid mushroom collector and a colleague of the late J.W. Groves, author of "Edible and Poisonous Mushrooms of Canada." Her particular research interest was the "cup-fungi" or Discomycetes, the group to which the morel belongs.

Report on the Foray

The foray held on 25 August 1979 at the University of Calgary's Environmental Sciences Centre, Kananaskis, Alberta was enjoyed by about 30 participants including amateur and professional mycologists from the Calgary area and as far away as Saskatoon, Saskatchewan. Unusually dry conditions before the foray resulted in scattered and solitary fruiting. But, rain the night before stimulated the development of several diverse and interesting agarics. Thanks to the enthusiasm and keen observations of participants, some 60 different species were noted. A check-list of these fungi is provided. Following the foray, considerable time was devoted to identification and discussion of findings. The group was treated to a delicious "chicken and mushroom" dinner at the Kananaskis Centre. We noted that the staff were careful to use "store-bought" mushrooms! The successful day closed with a slide-show and talk on poisonous mushrooms and mushroom poisoning by J.A. Traquair.

A CHECK-LIST OF FUNGI NOTED ON THE MARY ELLIOTT MYCOLOGICAL FORAY[1]

Kananaskis, Alberta 25 August 1979

Agaricus arvensis Schaeff. ex Seer.
Auricularia auricula (Hooker) Underwood
Chroogomphus vinicolor (Pk) O.K. Miller
Clitocybe irina (Fr.) Bigelow & A.H. Smith
C. sinopica (Fr. ex Fr.) Kummer
Collybia confluens (Pers. ex Fr.) Kummer
Cortinarius spp.
Crepidotus mollis (Fr.) Staude
Crepidotus sp.
Dacrymyces palmatus (Schw.) Bres.
Dentinum repandum (L. ex Fr.) S.F. Gray
Ditiola radicata Fr.
Entoloma sp.
Exidia glandulosa Bull. ex Fr.
Fomitopsis cajanderi (Karst.) Kotl. & Pouz.
Fuligo septica (Fr.) Wiggins
Galerina autumnalis (Pk.) A.H. Smith & Sing.
Geastrum rufescens Pers.
Gloeophyllum saepiarium (Wulf. ex Fr.) Karst.
G. trabeum (Pers. ex Fr.) Murr.
Gomphidius glutinosus (Schaeff. ex Fr.) Fr.
Gymnopilus croceoluteus Hesler
Gyromitra infula (Schaeff. ex Fr.) Quel.
Hebeloma crustuliniforme (Bull. ex Saint-Amans) Quel
Hirschioporus abietinus (Dicks. ex Fr.) Donk
H. subchartaceus (Murr.) Bond. & Sing.
Hygrophorus erubescens (Fr.) Fr.
H. niveus Fr.
H. olivaceoalbus (Fr.) Fr.
Inocybe spp.
Inonotus tomentosus (Fr.) Gibertson & Buddington
Laccaria laccata (Scop. ex Fr.) Cke.

SHAGGY MANES.

[1] Identifications by R.M. Danielson and J.A. Traquair

Lactarius deliciosus (L. ex Fr.) S.F. Gray
Lactarius spp.
Lentinus sulcatus Berk.
Lycoperdon perlatum Pers.
L. pyriforme Schaeff. ex Fr.
Marasmius androsaceus (L. ex Fr.) Fr.
M. epiphyllus (Pers. ex Fr.) Fr.
M. pallidocephalus Gilliam
Melanoleuca sp.
Mycena alcalina (Fr.) Kummer
M. epipterygia (Fr.) S.F. Gray
Mycena spp.
Omphalina ericetorum (Fr.) M. Lange
Peniophora rufa (Fr.) Boid.
Phlogiotis helvelloides (Fr.) Martin
Pholiota highlandensis (Pk.) A.H. Smith & Hesler
P. squarrosa (Muller ex Fr.) Kummer
Pluteus cervinus (Schaeff. ex Fr.) Kummer
Polyporus elegans Bull. ex Fr.
Poria sp.
Russula spp.
Scutellinia scutellata (L. ex Fr.) Lambotte
Stereum sp.
Stropharia sp.
Suillus brevipes (Peck) Kuntze
S. lakei (Murr.) A.H. Smith & Thiers
S. tomentosus (Kauff.) Sing., Snell & Dick
S. umbonatus Dick & Snell
Trametes sp.
Tricholoma vaccinum (Pers. ex Fr.) Kummer
Xeromphalina campanella (Batsch ex Fr.) Kohen & Maire

OUT OF THE OLDMAN RIVER

---

by Gordon Merrick
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Lethbridge, Alberta

A study on the Oldman River begun for the Province of Alberta in 1974, was completed in 1979. The final report of the Environment Council of Alberta on management of water resources within the Oldman River basin stated, "The most important recommendation is that rehabilitation of the irrigation system be completed with reasonable speed." This recommendation means, of course, that no need has been demonstrated for a dam to be built on the Oldman River. F.A.N. contributed several briefs to the study.

The section of the study on water quality has relevance for the whole Province.

Alberta Environment has set Alberta surface water standards and grants effluent licences which regulate releases of pollution into natural bodies of water. The Surface Water Standards are exceeded in at least five areas in the Oldman River System. This pollution has resulted in problems ranging from fish kills, clogged irrigation systems, to confirmed cases of sickness in people. The Oldman River is one of the cleaner rivers in the Province. Specific areas causing

trouble are the Crowsnest, Lethbridge, the confluence of the Bow and the Oldman, and an unidentified source below Lethbridge.

Some good news was the announcement that Calgary is building a multi-million dollar water treatment plant. Its effects will not be felt until 1983. Why did it take so long for something to be done to clean up the Bow? Didn't anyone realize that below Calgary there was one long sewer where there had once been a beautiful river? This, I suspect is partly the reason there is perhaps fifty miles of river without public access.

There are other trouble spots in the Bow before it joins the Oldman River, but the enormity of pollution emanating from Calgary masks other sources. The most evident sign of pollution is the algal growth, but what chemical dangers lurk in the environment is anybody's guess. Heavy metals such as mercury and lead, pesticides and herbicides such as DDT and 24D are not found in the water, but in the tissues of the plants and animals that live in or on the water. The study of the Oldman River Water Quality, of course, was not addressed to this problem.

The closing of the sugar factory at Picture Butte has removed another source of pollution from the Oldman River. The sugar factory at Taber has established a recycling system, which should bring it to within Alberta Environment guidelines. The study produced ten recommendations concerning water quality, three of which dealt with feed lots. Many people think that feed lots should receive special privileges to pollute rivers. Upon reflection, one must concede that they are just another industry and should be subject to the laws.

The public is only now becoming aware of the impact feed lots have on our rivers and lakes.

The total study of the Oldman is one of which the Provincial Government can be proud. Much secrecy has been dispensed with, and the promise of participatory government made in 1971, has been kept (if the government accepts the findings).

Will the Oldman be cleaned up? To quote from the study, "Of course, the protection offered by legislation is only as strong as the will and the ability of the ministers and their officials to enforce the legislation. There is a broad range of federal and Provincial legislation which include powers to pass regulations to control water quality. Certainly public willingness to comply is the easiest and cheapest approach."

The most important recommendation of the study meant that no dam was required to irrigate the south. The Provincial Government keeps telling us of plans for great water diversions from the north to meet the needs of irrigation. That indicates they have not read the report. We have our work cut out for us.

OVERHEARD

"Flowers grow in the barest of places, their beauty expanded by the roughness of their surroundings and the wonderful surprise at finding them there."

- Slivers of Glass,
by William A. Pedersen of
Missoula, Montana

- submitted by Murray A. Tozer

OCCURRENCE OF THE BLUE JAY IN LETHBRIDGE: A NEW NESTING RECORD

by Michael D. O'Shea
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Since 1967 the Blue Jay (*Cyanocitta cristata*) has become a common winter visitor to Lethbridge, and has been reported within the city every winter since 1971 (O'Shea 1979). In 1977 I began to receive reports of Blue Jays during the summer months and then more reports in 1978, with 21 observations alone for June and July. Although no nest was found, courtship behaviour (food exchanges in which the male feeds the female) were observed on five occassions, and I received reports of what may have been a juvenile Blue Jay in early August.

During the Spring of 1979, however, the Blue Jay did breed successfully within the city of Lethbridge.

Distribution

The status of the Blue Jay in Alberta as regarded by Salt and Salt (1976) is "resident in central Alberta from the Peace River district, Lesser Slave Lake, and Fort McMurray south to about Red Deer," and they consider the Blue Jay only "as a vagrant" as far south as Brooks. They report recent nesting records for as far south as Elnora, Beynon, Calgary and Okotoks. Godfrey (1966) believed this range to extend only as far south as Red Deer.

The Blue Jay is principally an eastern bird in North America, and is not commonly found in British Columbia or the western States, since it is not a mountain bird.

The Alberta prairies have been unoccupied by Blue Jays in the past, probably due to a lack of forested habitat. With the growth of prairie cities and towns, enough artificial forest habitat has been created to entice the Blue Jay to visit and recently to take up permanent residence on the otherwise barren prairie. These winter visitors have probably been juveniles since it is primarily only the young of the year which migrate, and these have probably come from the north since only the northern populations are believed to be migratory (Goodwin 1976). These new and unoccupied potential habitats it seems, have encouraged these winter visitors to return annually, possibly explaining the south's steadily increasing winter populations. Certain individuals may be expected to breed, therefore, a few years later upon reaching sexual maturity.

Winter occurrences of Blue Jays have been reported in recent years from such other southern communities in Alberta as Coaldale, Taber, Raymond, Cardston and Bow Island. I recently received two reports from Waterton Park on 12 October (2 birds) and 17 October 1978 (1 bird)*. Mountain occurrences are extremely rare (Salt and Salt 1976).

Coaldale, which is only approximately eight miles from Lethbridge, has recently reported Blue Jays during the summer months and has had a stable population of 5 birds this winter**.

---

* Simon Lunn, Waterton Park Naturalist
** Don and Gean Groft, Coaldale

Nesting Summary

On 10 April 1979 I received a phone call from a city resident who had reported seeing a Blue Jay carrying a stick in its bill. After carefully searching the area, I was successful in locating the nest in a partially completed state, on 12 April, at 12 Street and 6 Avenue A., South. The nest was in a large spruce located in the back yard of a local city residence. The nest was built at a height of approximately 30 feet in the 50 foot tree, and faced southward. A branch hung down over the nest, hiding it and making viewing from the ground difficult. All subsequent observations had to be done with a spotting telescope through a small space in the branches.

I did not examine the nest at any time during the nesting period, not wishing to disturb the nesting birds. With the spotting scope, however, most activity could be observed clearly with almost no disturbance to the birds.

Nest building was completed some time during the week of 25 April and judging by the birds' behaviour, eggs were probably present by 28 April. The two chicks were present by 19 May, but may have hatched as early as 16 May. Both chicks fledged from the nest on 9 June and left the nesting tree successfully on 10 June. I obtained a number of detailed photographs at this time, one of which accompanies this article.

Newly fledged Blue Jay chick, 10 June 1979, 12 Street at 6 Avenue South, Lethbridge, Alberta. One of two young raised successfully in Lethbridge's first recorded Blue Jay nest. Photo by Michael D. O'Shea.

The Nest

The nest was a small, neat structure constructed almost exclusively of small (approx. 12-15 cm long, 1-2 mm diameter) branches and rootlets. Examination of nest samples identify the majority of the branches as those of the Weeping Birch, these rarely exceeded 18 cm in length. There were very few spruce branches used. The nest was resting upon an approx. 5-7 cm thick branch and was built against the trunk. Two side branches of similar size helped to support the edges of the structure.

The nest was about 35 cm x 20 cm wide and was about 20 cm deep. The cup within the structure was small (5.6 cm deep x 8.8 cm wide), and neatly woven into the nest with branches and rootlets. The cup was lined with rootlets of approx. 0.5-1 mm diameter, but contained no grasses, feathers or down. The rootlets were not woven but laid inside the cup. The nest contained no paper, but had four strips of rigid, plastic material incorporated into the outer structure. There was no mud evident in nest construction.

Remarks

In all Corvidae, the two sexes are alike in appearance (Goodwin 1976), making sexual differentiation by sight difficult. However we have discovered that in Blue Jays, individual birds can be recognized by variations in the shape and size of a white patch on the central area of the greyish belly*. This feature can be seen readily in most cases with binoculars, making quick field identification possible.

In the nesting pair I studied, one bird's white patch was significantly larger than that of the other and was easily recognizable. With this difference in plumage, I was able to differentiate between the two sexes through behavioural characteristics. Of this pair the male was found to have the largest breast patch.

Courtship

Courtship appeared to be an important ritual with this pair of birds. On the day prior to finding the nest, I observed a food exchange in which one jay fed the other.

Most authors describe this behaviour as a courtship ritual (e.g., Bent 1946; Kilham 1956; Wetmore 1964). Goodwin (1976) reports that "feeding of the female by the male is frequent from early stages of courtship onwards."

Initially both jays were feeding together in a deciduous tree. The female flew off into another tree. The male immediately followed, carrying food in his bill. The female crouched down like a juvenile while the male fed her. The female's head was flung back with her bill pointing upwards, mouth open. The male stretched above her and pushed his bill into her gullet. This looked very much like a juvenile being fed.

Welty (1975) notes that "among birds possessing no visible sexual dimorphism courtship behaviour provides a means of sex recognition." It also serves to regulate "the timing of sexual readiness so that the reproductive physiology of a

---

* Bob and Dale Blair, Lethbridge

pair may be synchronized." It helps also to reinforce the pair bond.

This would agree with my observations, as I observed many such food exchanges by the Lethbridge pair prior to an actual mating observed ten days later.

Food exchanges did not stop following egg laying. Instead there appeared to be an increase in its occurrence. This would be expected since the female did all of the incubating. Usually the male fed his mate while she was on the nest. However, later in the incubation the female was observed to leave the nest regularily to be fed by the male nearby. This may be explained by this male's tendency to disappear for long periods of time, in one case for as long as one hour. During these long absences, the female often appeared to become highly distressed and would leave the nest and appear to be searching for her mate.

Nesting Observations

Immediately following hatching the female relied almost entirely upon the male to bring food, and rarely left the nest. Upon arrival the male would give the food to his mate who in turn would feed the young. Often he would aid her in the feeding or if the female was absent, would feed the young himself. If the male did not bring food for a long period of time the female would often stand up and begin to carry out rapid vertical head motions which looked very much like she was feeding the young.

Goodwin (1976) reported that "food is carried to the young in the gullet or sub-lingual pouch and regurgitated into the throats of the young." The female may have been storing food in her gullet and regurgitating it for the chicks when needed. Due to observational difficulties, however, I cannot safely conclude that she was actually feeding.

When the young were older both adults participated in food gathering activities and fed the chicks independently. Food exchanges between the adults continued to be an important ritual and often took place when the two met during foraging or shortly after feeding the young.

Throughout the nesting period, from nest construction until fledging of the young, the nesting pair was very quiet, vocalizing only occasionally. On the day of fledging the jays became their usual noisy selves.

I never observed any aggression or territoriality by the nesting pair towards other Blue Jays at any time during the nesting period. Instead the nesting pair seemed to 'enjoy' rare visits by other members of their species, immediately 'greeting' their visitor. I never observed more than one visitor, however.

Hardy (1961) reports that this lack of territorial behaviour is normal for Blue Jays, who are aggressive only towards potential rivals.

The nesting pair was extremely aggressive, however, toward all other bird species, especially toward Common Crows (*Corvus brachyrhynchos*). In one case both jays harassed a crow for over 20 minutes at a location over two city blocks away from the nest, before finally leaving it alone.

The jays were equally alarmed by cats.

Conclusion

To my knowledge this nesting is the first to be recorded for the Blue Jay in

Alberta south of Okotoks. This nesting record, combined with the rapidly growing winter Blue Jay populations in communities throughout southern Alberta, appears to leave little doubt that the Blue Jay is extending its range into the southern prairie region of Alberta.

I feel confident in predicting that the Blue Jay will continue to extend its range into southern Alberta, and I expect to receive increasingly more reports of this bird in the future, maybe even a second Lethbridge nest, or a Coaldale nest.

Acknowledgements

I am most grateful to Mr. and Mrs. Ross Jacobson who generously provided their backyard, containing the nest, for my observations. I also sincerely thank Dr. Stan Gregory who provided me with the initial observation which resulted in my finding the nest. Thanks also to Mr. and Mrs. Bill Dunn and Mr. and Mrs. Nel Stevens, local residents who provided their yards for the nest observation. I am indebted also to Betty Haig and Herb Sivyer who aided me in hours of nest observation. Thanks also to Shirley Arner, Darren Banasch, Bob and Dale Blair, Dorothy Clark, Don and Gean Groft, Simon Lunn and Mr. and Mrs. Keith Shaw.

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PROFILES ON ORGANIZATIONS WHOSE ACTIVITIES OVERLAP THOSE OF FAN:

1. ALBERTA ENTOMOLOGICAL SOCIETY

---

by Martin K. McNicholl
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In an effort to better acquaint Alberta naturalists with the activities of organizations whose interests overlap those of the Federation of Alberta Naturalists, we hope to publish a series of profiles on such organizations. These range from scientific societies to conservation groups.

In most cases, members of the organization featured will be invited to submit

an article on their activities and objectives. This first article is based on proceedings of two annual meetings of the Entomological Society of Alberta kindly sent to me by President Dr. H.R. Wong. As insects represent the largest class of animals, in fact outnumbering all other animal species combined, this seems like a highly appropriate organization on which to start such a series.

The constitution of the Entomological Society of Alberta was most recently published in the Proceedings of the Twenty-first annual meeting, pp.33-36. The society is affiliated with the Entomological Society of Canada. The object of the society is stated as "to foster the advancement, exchange, and dissemination of the knowledge on insects in relation to their importance in agriculture, forestry, public health, and industry and, for its own sake, among the people of the province of Alberta."

Any person interested in entomology may become a member by applying to the secretary, and paying dues, subject to approval of the executive. Student memberships are also available, and Honourary membership status sometimes conferred on persons distinguished in entomology.

Annual meetings consist of a full slate of scientific papers, ranging from highly technical subjects, such as aspects of insect physiology or anatomy, to practical matters, such as control of Bertha army worms. Thus, the subjects reflect well the stated objectives. A paper in the 1978 proceedings will ring a familiar note to Alberta naturalists around for the selection of the provincial bird: "*Rhynchites bicolor:* provincial insect?" by G. Pritchard of Calgary.

Major addresses and abstracts of other papers presented at these meetings are published in the resulting proceedings. Some meetings are held jointly with other societies, such as the Entomological Society of Canada in 1973 at Banff, and the Entomological Society of Saskatchewan at Lethbridge in 1978. A highlight of the 1973 meeting was the presentation of the Entomological Society of Canada's gold medal to the late Dr. Brian Hocking, then Chairman of the Department of Entomology at the University of Alberta.

In order to encourage interest in insects by students in high school, the society presents annual awards for insect collections. In 1973, the first prize at the senior level went to John Acorn, who will be known to Alberta Naturalist readers for his recent article on dinosaurs, and to Edmonton Naturalist readers for articles on many aspects of natural history, including insects.

Persons wishing to learn more about the society may obtain information from their president, Dr. H.R. Wong, Environment Canada, Canadian Forestry Service, 5320 - 122 Street, Edmonton, Alberta, T6H 3S5.

OVERHEARD

Uniformity of Ecological Principles:

"The tapeworm is as fit in its chosen habitat as the golden eagle in his - probably more so."

- H.H.J. Nesbitt, 1960, "Darwinism" in "Darwin in retrospect" (H.H.J. Nesbitt, ed.)

NATURALISTS' BOOKSHELF

The birds and birders of Beaverhills Lake
by Robert Lister. 1979. pp.264, illustrated.
Edmonton Bird Club, Box 5551, Edmonton. $9.50

Beaverhill Lake, 40 miles east of Edmonton, has been a Mecca for bird watchers for over 50 years. Lister's well written book presents the story of the lake, its birds and those who came to watch and enjoy them. The first part of the book draws extensively on the field notes of the late William Rowan, for many years head of the Department of Zoology at the University of Alberta. Lister was Rowan's technical assistant in the field, as well as in the laboratory, and was therefore a witness of most of the Rowan episodes he cites. With introductions and explanations of his own, Lister has built up these excerpts into an interesting and coherent whole. The first three chapters deal with spring collecting trips to the lake made by Rowan and a few others, mainly in pursuit of shorebirds.

Two chapters tell the often comical story of Rowan's repeated campaigns to capture a large number of live crows for his experiments. To the outsider, the tale of these adventures and misadventures is amusing; to Rowan they must have been disappointing, for not satisfied with his discovery that longer days stimulated the sex glands of birds, he persisted in the belief, denied by his own experiments and those of others, that the sex gland stimulation induced birds to fly north in spring.

The sixth chapter gives episodes from the Rowan diaries of waterfowl hunting about Beaverhill Lake. Here we often find the lament, familiar to most hunters, that if only one had located elsewhere one would have had a much better shoot. This chapter is followed by two which tell of the findings and activities of many members of the Edmonton Bird Club in the Beaverhill Lake area. The highlight of this section is the description of the first breeding in Canada of Black-necked Stilts in 1977.

This later chapter deals with the human, rather than the natural, history of the Beaverhill Lake district.

Dick Dekker's dust cover, showing Snow Geese over the lakeshore in colour, gives a vivid impression of the local scenery. There are also a number of photos, including one of Rowan, and a number of pleasing line drawings by Edgar T. Jones. The book should make good reading for all naturalists.

- E. Otto Hohn
Department of Physiology
University of Alberta
Edmonton, Alberta T6G 2H7

NATURALISTS' BOOKSHELF

The Rare Vascular Plants of Saskatchewan
by Robert V. Maher, George W. Argus, Vernon L. Harms and John H. Hudson. 1979.
National Museum of Natural Sciences, Ottawa
55 pp. plus maps

This is a totally businesslike publication; it is clear, concise and informative. The text is clarity personified and carries through to include the appendix. Here each exclusion is listed under subheadings stating the reason for omission, eliminating bothersome repetitions. For the unfamiliar a very thoughtful

list of common and/or wideranging plants that might confuse the field worker is also provided. The introduction of simple distribution maps is also very welcome general information at a glance.

As an amateur I was very disappointed that the authors chose not to include common names. It is a shame the text falls short in this one area when everything else in it is so easy to follow and understand. I agree that these names are "inconsistent," but believe that a concerted effort to apply them whenever they occur would encourage more people to read material such as this and possibly become involved. Conservation is everybody's business. Communication is vital.

You do not need to be a botanist to appreciate this volume, but you had better have a copy of Flora of Alberta on hand. Not all plants are listed in the latter, but it will serve adequately as a general guide.

The inclusion of peripheral species makes this an excellent addition to the reference shelf of all Alberta naturalists interested in plants.

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- Helene R. White
#102 - 13910 Stony Plain Road
Edmonton, Alberta T5N 3R2

LETTER TO THE EDITOR

Dear Mr. Editor -

Just a brief comment on Lois Fenna's review of the book by Deirdre Griffiths in the December issue of the Alberta Naturalist. Dr. Fenna professes to be surprised at the use of Fahrenheit units in the book, despite the "national acceptance" of the Celsius scale (quotation marks are mine). I would like to inform Dr. Feena that the Celsius scale has never been "accepted" by the people of Canada, and I note that many radio and TV stations have taken to giving both Celsius and Fahrenheit readings for temperature and rainfall.

The back of the hand to Lois Fenna, and a bouquet of red, red roses to Deirdre Griffiths.

Yours truly,

Lloyd Greenlee

Editor's Comment: The temperature scale was not a major point either in Deirdre's book or in Lois' review. In fairness to Deirdre, I should point out that her stay at Elk Island was prior to the official adoption of the Celsius scale. In fairness to Lois, the Celsius scale has received national adoption, though, as Mr. Greenlee points out, not total acceptance. Rainfall is, of course, measured in mm or cm and in, not degrees. - M.K.M.

RECENT PUBLICATIONS ON THE NATURAL HISTORY OF ALBERTA

by David M. Ealey and Martin K. McNicholl

Anonymous. 1979. Requests for information. Edmonton Nat. 7:54-58. - includes observations on 4 grebe species.

Anonymous. 1979. Bird sightings. Edmonton Bird Club Newsletter October 1979:2.

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Anonymous. 1979. Minutes of the Oct. 19 meeting. Edmonton Bird Club Newsletter November 1979:1-2. - includes birds observed at Beaverhills Lake on Sept. 30, 1979.

Anonymous. 1979. Minutes of the November 16 meeting. Edmonton Bird Club Newsletter December 1979:1-2. - with recent bird observations.

Anonymous. 1980. Chistmas bird count - Edmonton (December 16th). Edmonton Bird Club Newsletter January 1980:2.

Anonymous. 1980. Christmas bird count - Wabumun (December 23rd). Edmonton Bird Club Newsletter January 1980:2.

Baker, R.L. 1979. Specific status of *Keratella cochlearis* (Gosse) and *K. earlinae* Ahlstrom (Rotifera: Brachionidae): morphological and ecological considerations. Can. J. Zool. 57:1719-1722.

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Ebel, G.R.A. 1979. Highlights of bird observations from April to June 1979, in the Edmonton area. Edmonton Nat. 7:48-49.

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Erskine, A.J. 1979. Man's influence on potential nesting sites and populations of swallows in Canada. Can. Field-Nat. 93:371-377.

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FAN AND CNF NEWS

TO: TEACHERS OF ENVIRONMENTAL EDUCATION, ENGLISH, SOCIAL STUDIES AND SCIENCE
- All Grade Levels.

SUBJECT: FOURTH ANNUAL SCHOOL COMPETITION ON ENVIRONMENTAL THEME
- sponsored by Federation of Alberta Naturalists.

DEADLINE DATE: To the address below by April 1, 1980.

Mailed to the Schools - Between Dec. 1-15, 1979.
All Essays will be returned to the Schools by end of May/80.

THEME: A MAMMAL EMBLEM FOR THE PROVINCE OF ALBERTA

To date we have the Prickly Wildrose as Alberta's Flower emblem chosen in 1930; it is found throughout Alberta.

As of 1975, the Great Horned Owl was chosen as Alberta's Bird Emblem; it is also found throughout most of Alberta.

1980 is the occasion of Alberta's 75th anniversary, since it became a province in 1905.

For a Mammal Emblem - One to two pages, neatly written or typed naming the mammal of your choice with supporting reasons as to why you think it would be a suitable Mammal Emblem for our Province - supported by a drawing or a picture if you have one.

No need for a Mammal Emblem - if you support this view, write your reasons why Alberta should not have a mammal emblem.

Use 11 x 8½ inches size paper - neat, correct spelling and with some factual information as well as your own reasons for your recommendation.

Please mail to M. Lore, 1621 - 4 St. N.W., Calgary, T2M 2Z1 using first class mail and the form at the end of this issue completed and attached to your Essay.

PRIZES: Helen M. Schuler Memorial Competition for Schools

Grades I to XII - 5 Prizes each financial category of $15., $10., $5.
(15 cash prizes) plus honorable mention awards of crests, publications and prints.

Evaluation Committee will judge each entry on its merits according to the grade level performance.

- Mary Lore, Director of Environmental
Education for FAN
1621 - 4 St. N.W.
Calgary, Alberta
T2M 2Z1 Telephone: 289-6453

Ministik Hills to Host CNF Youth Camp - The first Canadian Nature Federation Youth Leadership Camp will be held at Lois Fenna's Ministik Hills Nature Centre from 17 July to 7 August 1980, provided the appropriate funds are available. Two participants of either sex aged 17 or 18 years old will be selected by FAN to attend from Alberta, with 17 other youths sent by other CNF regional representatives.

The emphasis of the activities will be the development of naturalist skills such as plant and animal identification, nature photography and sketching, soil, water and air testing, record keeping, etc. The interpretation of environmental relationships and the development of an ethical environmental philosophy will also be stressed.

- based on a memo to provincial and territorial affiliates by Gordon MacKenzie, Chairman CNF Youth Committee, and sent to the A.N. by Mary Lore, who will make the selection for FAN.

New Executive - At the 9th Annual General Meeting, held at Camp Caroline on 26 January, 1980, the Board of Directors elected the following officers:

President:	Mary Lore
Vice-President:	Maryhelen Posey
Recording Secretary:	Pat Clayton
Treasurer:	Charles Harper

In addition, the following appointed directors were approved: Lloyd Lohr, Mary Lore, Martin McNicholl, Myrna Pearman, John Powell.

Standing committee chairmen and FAN representatives to various conferences and external committees were also chosen. Their names are available from all directors.

- D.M.E.

Canadian Nature Federation Conference 1980 - The 1980 meeting of the Canadian Nature Federation will be held in August in Winnipeg. This year's theme will be "Catch our good nature," with the sub-title, "The biomes of Manitoba." Highlight of the program to many will be a cruise up Lake Winnipeg 24 to 28 August on the luxury cruise ship MS Lord Selkirk II. With the conference so close this year, and CNF President, Diane Griffin, residing in Edmonton, Alberta naturalists should be attending in abundance. Hopefully, we will have more details in the June Alberta Naturalist. - M.K.M., based largely on MNS Bull. 3(6), Feb. 1980.

Resolution - Lancaster Sound passed at CNF Annual General Meeting held at Ste. Anne de Bellevue on May 31, 1979

Lancaster Sound

Lancaster Sound is one of the richest biological areas in the Arctic. Birds that migrate, nest or feed in the area number as high as two or three million, representing over 50 per cent of Canada's entire eastern Arctic population. Lancaster Sound is also an important habitat for marine mammals. Seals, walruses, white whales, and narwhal annually migrate through in great numbers and many summer in or near the area.

In recognition of the importance of this area, the Canadian Committee of the International Biological Program has proposed that much of Lancaster Sound become a major ecological reserve and Parks Canada has identified and proposed several Natural Areas of Canadian Significance within the region. The Lancaster Sound area

is also a candidate for the United Nations' World Heritage List.

Native people on northern Baffin Island and the surrounding area depend on the abundant wildlife for subsistence. Their land claims are not yet settled.

A major oil blowout or spill coinciding with the breeding season could be disastrous to birds, causing a reduction in numbers from which some populations might never recover. The effects of spilled oil on marine mammals are unknown. There is no doubt, however, that an oil spill or blowout would have a severe immediate impact on the Arctic ecosystem. Sublethal effects could persist for decades.

Gaps in knowledge currently exist about weather patterns and ice movements in Lancaster Sound. Relief well drilling capabilities are unknown and oil spill containment and clean-up procedures have not been demonstrated for this deep-water area. Offshore drilling in Lancaster Sound cannot be considered in isolation from the development which would inevitably follow the discovery of petroleum in the region.

The federal government has adopted an Environmental Assessment and Review Panel recommendation rejecting for this year any offshore exploratory drilling in Lancaster Sound.

BE IT THEREFORE RESOLVED THAT the Canadian Nature Federation commends this prudent decision and urges the federal government to:

- withdraw Lancaster Sound from new development for a period of at least five years to allow further scientific assessment of the biological productivity and diversity of the area;
- initiate public discussion with a view to giving permanent protection to biologically important areas of the Sound;
- examine the long-term impacts on the Arctic marine ecosystem in light of possible production wells, seabed lines, tankers, storage facilities, processing plants, roads, airports and townsites related to extraction storage and transport of oil and gas in areas adjacent to Lancaster Sound; and
- ensure that any future developmental proposals for Lancaster Sound are subject to further formal environmental assessment and review including full public hearings.

- submitted to the AN by Mary Lore,
FAN representative to CNF

OVERHEARD

"But what difference does it make to man if there is one less species? For a few species their worth is obvious. The impact of just one species, the rubber tree, on our civilization is enormous and yet was unpredictable two centuries ago. And who would have suggested 40 years ago that a mold of the genus *Penicillium* might have value other than to flavor cheese?

We are far too ignorant of the biology of our planet to state which species may ultimately have great practical value and which not; it makes no sense to throw a species onto the trash heap of extinction because its practical value is unknown."

- from the paper, Threatened and Endangered Species
by S. Dillon Ripley and Thomas E. Lovejoy
- submitted by Murray A. Tozer

F.A.N. Spring Meeting - Our spring meeting is being hosted by the Trumpeter Swan Naturalists in Grande Prairie on 17, 18 and 19 May 1980. The agenda has been planned to accommodate those who arrive by chartered bus (see below).

Saturday, May 17

12:30 F.A.N. directors meeting. Wembley School.
Field trip to Museum and area parks.

6:00 p.m. Buffet supper. Followed by guest speaker and/or slides and/or movies of the area.

Sunday, May 18

9:00 a.m. Tour with T.S.N. members to Ducks Unlimited (Canada) project, around area lakes, through Saddle Hills to historic site of Dunvegan on the Peace River, and back to home base for Bar-B-Q supper and social gathering.

Monday, May 19

Head for home!

The Federation will have room for 40 members to travel on a charter bus from Edmonton to Grande Prairie, leaving approximately 06:00 a.m. on Saturday 17 May. We can subsidize the bus to some extent, but it will cost $15.00 per person for a return ticket. The bus will leave Grande Prairie early Monday morning.

Accommodation is available in hotels and motels in Grande Prairie, but will likely have to be booked some time in advance. Campgrounds are available near meeting places and in T.S.N. members' backyards. Billeting in our host club member's homes may be possible, but has not been finalized.

If you are interested in attending F.A.N.'s first meeting in the northern half of the province, please fill out the inserted registration slip and mail to the address indicated. Additional details will be sent to you. For those travelling to Edmonton on Friday night, note that we expect to have billetting available in Edmonton member's homes overnight. Please register early, and no later than May 1st if you are planning to take the bus. - D.M.E.

F.A.N. summer meeting, 1980 - The Red Deer River Naturalists are hosting this meeting, which should be a fun-filled field trip. The dates are 5, 6 and 7 July. We will meet at the Kootenay Plains campground near Abraham Lake. Some members will be at the campground on the night of 4 July. To get to the Kootenay Plains, simply drive west of Highway 11 until you reach the south end of Abraham Lake. Signs will be posted.

Some of the possible activities are hikes to Indian dancing grounds, a visit to Siffleur Falls, and a visit to Whirlpool Gap along the Red Deer River. - D.M.E.

PRESIDENT'S PAGE

President's Report to Annual Meeting, January 1980

by Mike McIvor, Past President

Without the perspective of time or distance it is difficult to reflect upon the affairs of an organization such as F.A.N., or to speculate about the future. However, it is possible to outline highlights of the past year and indicate the activities in which we have been involved.

Membership

Our membership has not increased, a factor which has been a source of disappointment to me, and a matter which requires more attention and effort from all of us.

Operations

There have been a number of changes in the operation of F.A.N. which deserve mention. First and most importantly, we were finally able to relieve Lyman Matthews of the heavy burden he had been carrying in our day to day business. Lyman deserves our thanks and best wishes for the immense contribution he made to F.A.N. We would have been in grave difficulty without him. Heir to Lyman's role as Treasurer has been Charles Harper who has been doing an excellent job and appears ready to become very tough with us in demanding that we exercise financial responsibility and more careful planning. Myrna Pearman has been a big help in the position of Membership Secretary despite facing serious personal problems this year. And the person I feel has been the glue holding much of our operation together has been Dave Ealey, who deserves a great deal of credit. Also our new Corresponding Secretary, Evangeline Case, has performed ably and cheerfully.

Alberta Naturalist

There have been changes with regard to the Alberta Naturalist as well. Virginia Lang Young, under whose guidance the magazine continued to improve and mature, had to step down as Editor, but fortunately Martin McNicholl was available and willing to carry on. Once again it was Dave Ealey, Assistant Editor, who managed us through the transition period. The publication of our first special edition in 1979 was a milestone, and there are plans to continue that special format for projects as well as plans to publish a special issue this year commemorating our 10th Anniversary, and another next year to mark the occasion of the American Ornithologists Union Conference in Edmonton. The Alberta Naturalist is our major showpiece and one of which we can be very proud.

Field Meetings

It was another successful year for field meetings with the Lethbridge and Buffalo Lake clubs proving to be very generous hosts. These meetings continue to offer great opportunities to expand and enhance our knowledge of the natural history of Alberta. The fact that over twenty people travelled to Cold Lake in June to explore that area with Eric Tull, Al Wiseley and Terry Thormin, is an indication of how much interest there is.

Camp Caroline

Camp Caroline remains the focal point of our winter activity and appears ideally suited to the kind of gathering where we can get to know one another, and

invite guest experts to lecture about various aspects of natural history and conservation.

Grants to Member Clubs

This was an innovation this year and has begun a process that I hope we can continue. Grants in varying amounts, were presented to the Calgary, Lethbridge and Trumpeter Swan groups to be used for special projects. The Board of Directors is working on some policy guidelines to deal with this matter, which I trust will enable F.A.N. to assist the member clubs with some of the projects they have in mind but feel they cannot afford.

Federal-Provincial Wildlife Conference

We were very fortunate this year to have two delegates representing F.A.N. at this important annual conference. I know that Maryhelen Posey and Michael O'Shea did an excellent job of presenting our views, even if informally, and of course their articles in the December A.N. testify to the value of such events being reported.

Calgary Power Transmission Line Hearings

I should make special reference to these hearings because Maryhelen Posey spent a great deal of time and effort in attending them and conveying the naturalist oriented concerns to the Energy Resources Conservation Board. Such hearings are often very tedious and drawn out, and Maryhelen deserves a lot of credit for staying with it.

Committees

Most of F.A.N.'s committee activity will be reported elsewhere (Editor's note: these will be available from directors when the minutes are circulated. They will not be published in the A.N. - M.K.M.), but there are a few committees or chairmen who should be singled out. As usual, John Powell has kept F.A.N.'s voice alive in the Public Advisory Committee to the E.C.A., and Fish and Wildlife Advisory Committee, and the Alberta Ecological Survey. I should also say that John has been a primary source of advice and help to me throughout my term as President. He is an invaluable member of our organization.

Mary Lore and the members of her Environmental Education Committee have continued the good work which began when Mary took over this committee. Her efforts to reach the younger people in the province will, I am sure, bear fruit in the years ahead.

As Research Committee Chairman, Charley Bird continues to amass data for his plant phenology project. In fact, Charley feels that these data will have some very practical uses. I know he would want me to urge you all to "keep those cards coming." Flowering season can't be that far away.

Maryhelen Posey, our reluctant publicist, has finally had the opportunity to spend some money. We are hoping to have some display panels which will be interesting, flexible and mobile, to enable us to display our credentials and wares at various public gatherings.

The Alberta Ornithological Records Committee has been re-examining its roles, its purpose, its means and its methods of operation. The members of this committee have been working hard and deserve our support. I am confident that between us we will be able to establish a structure which will be useful, viable and accepted by all of Alberta's naturalists.

Environmental Coordinator

F.A.N. has joined with several other environmental groups in the province to hire Dianne Pachal on a part-time basis as an environmental coordinator. This step is probably long overdue, but Dianne has begun her work with enthusiasm and I hope this type of position is one which we can continue to support.

In closing, may I offer thanks to Mary Lore, John Powell, Dave Ealey, Diane McIvor, Maryhelen Posey, Dorothy Broadbent, and all the others who have helped and encouraged me in my two years as President. It has been an interesting and worthwhile experience. Let us promise our support to my successor, the new executive, and the Board of Directors.

EDITOR'S PAGE

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by Martin K. McNicholl

Three topics came to mind this time as possible subjects for the Editor's page. Rather than elaborate at length on any, I decided to mention each briefly. First, we can look forward to a good year for the Alberta Naturalist if the quality of material coming in continues at the present level. Readers are urged to send in short items for the "News and Notes" and "Conservation News" sections - too many at present are written by the editors. Thanks to Helene White for sending several drawings for use as fillers, and to Helen F. Graham and Murray A. Tozer for sending material to use as "Overheards." We have a large number of book reviews out at reviewers currently. At present, we could use more major articles, as we would prefer to have a slight backlog of these on hand. If readers know of observations of friends that should be shared with other naturalists in Alberta, please urge them to send in articles. This year there will be two supplements, one on research projects, as was published last year, and one on the history of FAN and its corporate member clubs.

My second topic is once again membership. As pointed out by Past President, Mike McIvor, membership growth has been disappointing. Once again, local clubs should encourage members to join both FAN and CNF so that the naturalist voice may be effective at provincial and national levels.

Finally, I must comment on a reported budget cut in provincial government programs for Peregrines in favour of breeding pheasants! If Alberta government priorities rest with introduced game birds over native fauna, we naturalists still have a long way to go in public education. Now that the pheasants are here, pamper them if you must, but not at the expense of endangered native species.

OVERHEARD

"People breed cities, and cities breed contempt for the land and the things that grow there naturally."

- The Endangered Ones,
by James A. Cox, 1975

- submitted by Murray A. Tozer

CLUB NEWS

CALGARY FIELD NATURALISTS SOCIETY - C.F.N.S. programmes for the winter session are proving interesting, but we would like to see more of our 250 members attending regularly. As well as our monthly meetings, Audubon films, study nights and at least two field trips each month are planned for the future.

Since work on Nose Hill Park is at last coming to a successful conclusion, the Natural Areas Committee is now planning its strategy for other areas needing attention in 1980. We look forward to introducing F.A.N. members from outside Calgary to some of our natural areas at the Fall meeting in September.

The Society's first attempt at a quarterly publication (Fall 1979 issue) proved a success in looks and content thanks to our hard-working editor, Ann Machin. In his introduction Peter Sherrington explained that the name PICA had been chosen for our magazine because the magpie is "beautiful, chattering, intelligent and stays with us all year." He did not add that it also eats a lot! Cost-cutting tips from other clubs with more experience with this type of publication would be welcome!

- Dorothy Dickson

EDMONTON BIRD CLUB - The winter program continues until April. Meetings are held in Room 245, Agriculture Building, University of Alberta at 20:15. The March program has been changed such that the last two meetings are now planned as follows:

March 15. Richard Fyfe on "Peregrine Falcon research fieldwork."

April 18. Lu Carbyn on "Birds of Namibia and South Africa."

There will be regular field trips on weekends, beginning in early May. For further information, contact:

Bob Turner 436-4590.

At the December meeting, a motion was passed to request that the half-mile no-hunting zone around Beaverhills Lake be reinstated. There has been some concern recently by local farmers and naturalists that waterfowl populations are declining there during migration because of hunting around the northern half of the lake.

- D.M.E.

EDMONTON NATURAL HISTORY CLUB - At the annual general meeting in January, we elected our new executive for 1980, including Margot White (President), Alf Scott (Vice-President), Marg Lewis (Secretary), Jim Lange (Field Secretary), and Charles Harper (Treasurer).

We were proud to present our fifth annual Loran L. Goulden Memorial Award to Ms. Joy Finlay of Edmonton for her extensive work on environmental education in the public school system.

During the winter, the club holds meetings on the second Tuesday of each month at 8.00 p.m. in the Provincial Museum of Alberta auditorium - featuring illustrated talks on subjects of interest to members, followed by coffee and conversation. Warmer weather presents frequent opportunities for organized field trips into surrounding areas.

We invite members of FAN and of our corporate fellows to join us when they find themselves in Edmonton.

- reporter not stated

LETHBRIDGE NATURALISTS' SOCIETY - Our outgoing executive deserve thanks for their hard work in making our organization programs continually interesting and productive. Our Past President, Duncan Mackintosh, deserves special thanks for his many hours promoting our society far and wide, expanding the bird count to areas other than the Lethbridge immediate area, and last but not least almost doubling our membership. Our new President, Dr. Alan Roberts, and his executive already are busy with plans for the coming year.

Our local bird count on 26 December involved 46 people counting 35 species. Our group is invited each year to Waterton Lakes National Park, 30 December, where under the guidance of Simon Lunn we are dispersed along with park volunteers to various areas of the park to count birds, mammals or their tracks. This year's count turned into a wonderful social event at Carolyn and Simon's home, where under the influence of hot chili and mulled wine 18 of us tallied 25 species with a total of 231 birds. The highlight of the day was the reporting of 4 Chestnut-backed Chickadees presently listed as hypothetical in Alberta. (Editor's Note: I have asked Mrs. Ross to urge the observers to submit details to the AORC, and publish the observation in an appropriate journal - M.K.M.)

Duncan Mackintosh, head of our special Bluebird Project, is busy with his committee of 3 building several hundred houses and repairing old ones to extend the already existing bluebird trail. In 1979 a total of 7 adult pairs fledged 36 young. One interesting aside is that the houses not occupied by bluebirds are not always left empty. There have been a variety of occupants including swallows, wrens, and Eastern Kingbirds. Even hornets and mice claimed two houses as homes. Duncan also reports "A woodpecker admired a bluebird house and decided to start a home in it. First the entrance hole was too small, so he promptly enlarged it to a convenient size. A nest was built, eggs laid and was incubation in progress when disaster struck. A vandal with his shotgun left the scene a mess of scattered matchwood."

One of our members, Gordon Merrick, is concerned about the water quality of our Oldman River and has been monitoring the latest government action and study of this river. Since F.A.N. contributed several briefs to the study he includes a brief report of his concerns in this issue of the Alberta Naturalist.

Our exceptional weather has kept huge flocks of waxwings feeding on Buffalo Berry bushes in the river valley but at our feeders we have Blue Jays, Red-breasted Nuthatches, Downy Woodpeckers and flickers calling daily.

- Hazel Ross

TRUMPETER SWAN NATURALISTS - The T.S.N.'s meetings have moved back, as of October, to the Wembley School.

The present big thing, environment-wise in our area, is the proposed construction of a gas processing plant. The Company, Cheiftain Development Co. Ltd., proposes to make their emission control 97% efficient. There is now the technology to make it 99.8 to 100% efficient. At 97%, there would be 7.6 tons of sulphur-dioxide spewed into the air every day. A number of our members are very concerned about this, not only from a health and agricultural standpoint, but also as the plant site, as it is now planned, is surrounded by lakes on which the Trumpeter Swans nest.

We will be talking about this at our next meetings, possibly with the thought of asking the province to consider requiring future gas plants to install the maximum emission controls.

- Ellen Craig

NOTES AND NEWS

New Banding Report - The Canadian Wildlife Service has initiated a new feature for banders - an annual summary of banding efforts in Canada, to be published in the Progress Notes series. The first such report, covering 1977 (see Recent Literature this issue - Poulin *et al.* 1979 for citation) shows 20 banders in Alberta, banding 30,745 birds of 138 species. Cam Finlay is listed among banders with high totals - 2752 bandings of 14 species and for noteworthy totals of single species: 1428 Tree Swallows. Tables list totals for each province or territory of each species banded, number of banders banding each species, top three species banded (Alberta: Mallard, Common Pintail, Blue-winged Teal), and top three species exclusive of waterfowl (Alberta: Tree Swallow, House Sparrow, Red-winged Blackbird). Two Black-necked Stilts banded at Beaverhills Lake are incorrectly listed for Saskatchewan in Table 3, but correctly listed for Alberta in Table 6. - M.K.M.

Lein Receives Recognition - The September 1979 Ornithological Newsletter of the American Ornithologists' Union lists M. Ross Lein, of the Department of Biology, University of Calgary among A.O.U. members elected to special membership classes at the 97th Stated Meeting of the union in August. Ross was elected to "Elective Member" status, generally regarded as formal recognition of significant contribution to ornithology. Congratulations, Ross! - M.K.M.

Cochrane Conservationist Dies - We regret to note the recent passing of Beryl Smeeton of Cochrane, Alberta. Beryl and Miles Smeeton had been raising Swift Foxes, extirpated in the wild in Canada, on their farm, with hopes of re-introducing them into the wild. We hope to have an article on their work in a future issue of the Alberta Naturalist. - M.K.M., based on a note in Bow Valley Naturalist Newsletter No.4, December 1979.

Joy Finlay Receives Goulden Award - The fifth Loran L. Goulden Memorial Award for outstanding work on natural history within the province of Alberta was awarded to Ms. Joy Finlay at the annual meeting of the Edmonton Natural History Club on January 8, 1980. Ms. Finlay is recognized in this award for her work with naturalist groups in Alberta, and especially for her outstanding achievements in promoting environmental education as a fundamental component of school curricula in Alberta and most notably Edmonton. Her influence will long be felt as a legacy of future generations of environmentally aware citizens. We find the selection of Joy for this award in late 1979, the closing days of the International Year of the Child, to be at a particularly appropriate time.

- Martin K. McNicholl, Chairman,
Loran L. Goulden Memorial Award Committee

(Committee: Bruce D. Bembridge,
Dr. Frank Harper, Ms. Gwen McCauley,
Dr. Martin K. McNicholl).

Ray and Kathlene Salt Retire to Coast - Readers will wish to join me in wishing Prof. W. Ray Salt and his wife, Kathlene, many happy years in their new home in Sooke, near Victoria, Vancouver Island., B.C. Prof. Salt, an honourary member of FAN, is best known as author or senior author of all three versions of the "Birds of Alberta." He officially retired a few years ago as Prof. Emeritus in the Dept. of Anatomy, Univ. of Alberta, but has been teaching on contract since. He was the second recipient of the Loran L. Goulden Memorial Award, on which occasion a summary of his career to date was written in the Alberta Naturalist 7:103-107, 1977. Best wishes, Ray and Kathlene! - M.K.M.

Karvonen Film Shown in Winnipeg - The January 1980 issue of the Bulletin of the Manitoba Naturalists Society (3(5):4) features photographs of Albert Karvonen in attendance at an MNS film night on 29 October 1979, when his film, "Osprey's domain" was shown. The film is the sixth in a series by Albert, a Sherwood Park naturalist, and was narrated by Lorne Wallace, also of Sherwood Park. - M.K.M.

Eyeless Crows? - A note by William J. Merilees in the December 1979 issue of the Federation of B.C. Nat. Newsletter (17(4):6) points out that crows on the signs signifying Highway 3 in Alberta are eyeless. Crows on the B.C. part of the highway are more fortunate. Our blind crows are part of a new motif signifying Crowsnest Pass. According to Mr. Merilees, a society has been formed which will affix a supply of "bionic crow eyes" to our poor Alberta crows - the name of the society? - Society for the Care and Rehabilitation of Eyeless Crows, or SCARE-CROWS! - M.K.M.

Environmental & Photography Courses at Yamnuska - The Young Men's Christain Association is running a series of environmental courses at Yamnuska Centre, Seebe, Alberta. The main instructor is Dr. Jim R. Salt, co-author of "Birds of Alberta," and a frequent contributor to the Alberta Naturalist. Additional information, including prices and course dates, can be obtained from Jan Crook, Outdoor & Environmental Education Coordinator, Community Extension Unit, YMCA, 332 - 6 Ave. S.W., Calgary, Alaberta, T2P OR5 (phone 269-6701). The program includes a "Basic Acclimatization Workshop," ecological instruction for teachers, seasonal ecology workshops, bird song, mammal tracks, and a wide variety of nature photography courses, from introductory to advanced. - M.K.M., based on program sent by Jan Crook.

Ministik Hills Field Study Centre - Spring and summer weekend courses at Ministik this year will consist of the Bird Weekend on 9-11 May, in which Terry Thormin will lead field trips around the centre, to Beaverhills Lake, and to Ministik Lake looking for nesting and territorial behaviour as well as assisting in field identification; and a new course over the last weekend in June and the Canada Day holiday: 27 June to 1 July inclusive.

The latter will be called 'The Earth Environment,' and led by Dr. John Movean of the University of Calgary, who is adept at helping people discover interesting things about soil, rocks, the atmosphere and the sun, moon, and stars.

Both these courses are presented in cooperation with the University of Alberta, Faculty of Extension, but more information can be obtained from Lois Fenna, R.R.2, Tofield, Alberta (phone: 662-2280).

Later in July and August, Ministik Hills will be hosting the first CNF Youth Nature camp, in which young people from every province and territory in Canada will study and recreate for three weeks under the guidance of a variety of Alberta's liveliest naturalists. - Lois Fenna

Showing of Helene White Paintings - In a letter to the Editor, submitting the book review in this issue, our frequently contributing artist, Helene White, informs me that she has recently completed a "small series" of Lepidoptera paintings. These will be shown in the Alexander Galt Museum in Lethbridge 5 May to 22 June, as "Whispering Wings." Lethbridge members will be sure to want to see this exhibit, and I suspect members elsewhere would find a trip down to see it well worth their while. Incidently, Helene has sent me another package of "fillers" which will grace the pages of forthcoming issues. - M.K.M.

Western Birds adds Colour - For the first time, Western Birds, journal of the Western Field Ornithologists, has published colour photographs in Vol. 10, No.2, 1979. This is a journal concerning birds of the western U.S., British Columbia,

and Alberta. Alberta members are Dr. M. Ross Lein, Dr. Martin K. McNicholl, and Dr. M.T. Myres. The latter is on the editorial board. The only libraries in Alberta currently carrying the journal are Lakeland College in Vermillion and the Canadian Wildlife Service in Edmonton. Alberta ornithologists wishing to subscribe are advised to write Phil Schaeffer, 376 Greenwood Beach Road, Tiburon, California 94920, U.S.A. Membership is $7.50 U.S. annually, cheques or money orders payable to Western Field Ornithologists. - M.K.M.

CONSERVATION NEWS

Red Data Books - Dr. David Munro reports in his Director General's Report May 1978 to May 1979 (I.U.C.N. Bull. new ser. 19(7), 1979) that the first part of a revised Red Data Book on Birds prepared by ICBP for IUCN was published in July 1978, with a second part due in 1979. A new volume in the series - covering 250 plants from 89 countries was published in December 1978, with additional sheets being compiled for a second Plant Red Data Book. Large numbers of new sheets have also been published for the Red Data books on fish, amphibians and reptiles, and mammals. The Red Data Books are publications of the International Union for the Conservation of Nature (IUCN) of internationally recognized endangered species. They are prepared in loose-leaf format, so that new species can be added, and status on previously included species revised without waiting for a new edition - M.K.M.

Concern at Wood Buffalo - The November 1979 issue of the Edmonton Chapter Newsletter of the National & Provincial Parks Association of Canada (vol.11, No.4, p.5) reports concern over the effects of Cree land claims in Wood Buffalo National Park. Of particular concern are the fate of the Wood Bison herd and the possibility that anthrax in park animals will spread to domestic animals if these are allowed into the park. These in turn could spread the disease to other parts of the province. - M.K.M.

Illegal Pet Sales - According to a Calgary Herald report of 12 November 1979 the selling of several species of exotic animals in Calgary pet stores is being deliberately ignored by the provincial Department of Fish and Wildlife even though the sales are illegal under the Alberta Wildlife Act. This is being done because of proposed changes in the Act which would relax current restrictions. The Calgary Humane Society and Canadian Veterinarian Medical Association are opposed to the changes. Without details of the current restrictions or of the proposed changes, I cannot comment on the desirability or otherwise of the changes, but there can be no doubt that existing laws should be enforced until such time any changes are made. In the meantime, some form of public participation in the decision to make changes or otherwise seems in order. A member, whose name must remain anonymous, has compiled an inventory of parrots in Alberta pet stores in December 1979. - M.K.M.

Edmonton Fur-bearers - This is the name of the Edmonton Chapter of the Association for Protection of Fur-bearing Animals. Memberships at $2.00 each/year may be sent to Edmonton Fur-bearers, Box 1328, Devon, Alberta, TOC 1EO. The organization is dedicated to stopping current cruel methods of trapping animals for their furs, and replacing these with more humane trapping methods, and also promoting the use of fake furs instead of animal furs - M.K.M. - based on a newsletter (undated) from the Edmonton chapter, courtesy of Elly de Jongh, Treasurer, Edmonton Fur-bearers.

Nose Hill, Calgary - According to an article by Ian Halladay in the first issue of Pica (1:38-40, 1979), the naturalist point of view is represented well in the proposed master plan for Nose Hill Park in Calgary. The plan emphasizes the natural beauty of the hill with a minimum development proposed. However, City Council must

Results of December 1979 Inventory of some Alberta Pet Shops - Parrots, primarily

SPECIES	SCIENTIFIC NAME	A	B	C	D	E	F	MISC. INFORMATION
Goldie's Lorikeet	*Trichoglossus goldiei*		x	x				New Guinea, uncommon
Chattering Lory	*Lorius garrulus*				x			Morotai Island; common
Stella's (Papuan) Lorikeet (Lory)	*Charmosyna papou (stellae* var.)		x					mountains of SE New Guinea; restricted, fairly common
Rose-breasted Galah	*Eolophus roseicapillus*						x	endemic to Australia; plentiful
Lesser Sulphur-crested Cockatoo	*Cacatua sulphurea*	x		x	?		x	SE Asian islands, uneven distribution
Citron-crested Cockatoo	*Cacatua sulphurea (citrinocristata* var.)		NP					restricted to Samba Island
Great White Cockatoo	*Cacatua alba*		?		?			
Salmon-crested (Moluccan) Cockatoo	*Cacatua moluccensis*	?	x	?			x	Moluccan and other SE Asian Isls.; primarily coastal
Cockatiel	*Nymphicus hollandicus*	x	x	x	x	x	x	endemic to Australia
Eclectus Parrot (Grand var.)	*Eclectus roratus*						x	S Moluccan Islands; variable; common-uncommon
Budgerigar*	*Melopsittacus undulatus*	x	x	x	x	x	x	endemic to Australia; abundant; bred in captivity
Grey Parrot (African)	*Psittacus erithaceus*	x	x	x	x		x	Central Africa; common
Grey Parrot (Timneh var.)	*P. erithaceus timneh*						x	W coastal Africa; status?
Jardine's Parrot	*Poicephalus gulielmi*						x	C Africa to coast (W);
Peach-faced Lovebird*	*Agapornis roseicollis*		x	?	?	?		SW Africa; plentiful
(Black) Masked Lovebird*	*Agapornis personata?*						x	E Africa; colonial nester
Long-tailed Parakeet	*Psittacula longicauda*						x	SE Asia and islands; common
Blue and Yellow Macaw	*Ara ararauna*		x	x		x		N & C South America; declined or extirpated in access. areas
Catalina Macaw (Caninde?)							?	W. Cent. So. Amer.; possibly restr. but little known
Military Macaw	*Ara militaris*			x			x	Mexico to Bolivia but range disjunct
Scarlet Macaw			x		x		x	C. Amer. - N. So Amer; extp over much of its range

SPECIES	SCIENTIFIC NAME	A	B	C	D	E	F	MISC. INFORMATION
Green-winged Macaw	*Ara chloroptera*		x				x	N South America; uncommon
Yellow-collared Macaw	*Ara auricollis*						x	C So. Amer; common in parts of its range
(Severe) Chestnut-fronted Macaw	*Ara severa*						x	N So. Amer; variable; f. common-rare
Hyacinth Macaw				x			x	Interior Brazil; little known; $8500. local price
(Noble) Red-shouldered Macaw	*Ara noblis*						x	E & N So. Amer; very common in places
Jandaya Conure	*Aratinga jendaya*		x				x	NE Brazil; sporadic distribution - uncommon
Brown-breasted (Chestnut?) Conure	*Pyrrhura culliptera?*						x	Central Colombia; present status unknown
Slender-billed Conure	*Enicognathus leptorhynchs*						x	Central Chile; f. common but marked overharvest, disease problems
Blue-headed Parrot	*Pionus menstruus*						x	N So Amer; fairly common
Yellow-billed Amazon	*Amazona collaria*						x	Jamaica; widespread & common
(?Red)-spectacled Amazon	*A. pretrei?*	NP						SE So Amer; restr. to 1 forest type - threatened
Lilac-crowned Amazon	*A. finschi*		x					W Mexico; uncommon-plentiful
Blue-fronted Amazon	*A. aestiva*	x		x	x	x		C & SE So Amer; common most parts
Yellow-crowned Amazon (yellow-naped var.)	*A. ocrocephala*						x	C Mexico to Peru, Brazil; variable; common to rare
?Yellow-fronted Amazon	*A. ochrocephala* or *A. amazonica*	x						(as above); status?
Orange-winged Amazon	*A. amazonica*						x	N So Amer; common to plentiful
Mealy Amazon	*A. farinosa*		x					C & N So Amer; fairly common
?Mexican Red-headed Amazon (Green-cheeked)	*A. viridigenalis*						x	NE Mexico; fairly common (old report)
Toucan			x					
Mynah		x		x	x	x		

* legal (Alta); A - Alf's Pet House Ltd, Calgary; B - Bow Valley Aquarium and Pets Ltd., Calgary; C - Hole in the Wall, Calgary; D - Pet City, Northland Village Mall, Calgary; E - World of Pets, Calgary; F - World of Pets, Edmonton.

still approve the plan and provide funds, so the battle has not been won yet. Hope is seen in the council's attitude, as city people have "gone out of their way" to seek advice on other issues, such as a Calgary rivers plan according to Michael Rogers in another report (Pica 1:42-43, 1979) - M.K.M.

Warden Reprimanded for Lake Louise Convictions - The December 1979 issue of the Newsletter of the Calgary/Banff chapter of the National and Provincial Parks Association of Canada reports that Eric Langshaw the warden responsible for the three chartes of garbage mismanagement brought against Chateau Lake Louise, was reprimanded by park officials for insubordination. Langshaw laid the charges after receiving no answer to four requests for permission to do so, and refused a request by Parks Canada to withdraw the charges. In the meantime, the chateau was convicted of two of the charges, and Banff superintendent, Paul Lange, congratulated Langshaw and a colleague for their well documented charges. NPPAC will help in finding funding for legal aid if Langshaw later needs it. The December 1979 issue of the Bow Valley Naturalists Newsletter reports that Parks Canada has initiated disciplinary action which Langshaw is appealing through legal means. A defence fund is being set up about which Mike McIvor can be contacted in Banff at 762-4160. - M.K.M.

Ptolemy Basin - The December 1979 issue of the Newsletter of the Calgary/Banff chapter, N.P.P.A.C. also contains a note that a lime company may be seeking exploration and development permits to open a limestone quarry in Ptolemy Basin, currently within the Prime Protection Zone of Alberta's East Slopes. The area contains the only known limestone caves in Alberta's Rockies, with some unique biological features. - M.K.M.

Dinosaur Provincial Park - According to the January 1980 issue of the Edmonton Chapter Newsletter, National and Provincial Parks Association of Canada (12(1):2), Dinosaur Provincial Park in Alberta was designated a World Heritage Site in October 1979 - M.K.M.

New Migratory Species Convention - The latest issue of the Ontario Naturalist 19(3):40, 1979 contains more information on Canada's failure to sign a new international convention on migratory species. Apparently the Canadian delegation to the diplomatic conference in West Germany where the convention was signed, was generally in favour of the convention, but did not ratify it because Canada did not want marine species included. Canada's position maintains that marine animals should be covered by the Law of the Sea, and that the Canadian government should consult with the provinces before agreeing to any convention involving wildlife. The Ontario Naturalist article commented on the welcome promotion of the convention by developing nations, particulary African. - M.K.M.

Wabamun Weeds - Alberta Environment plans to start a 2½ year study on weed problems at Lake Wabamun in response to concerns of the Lake Wabamun Preservation Association, according to Environment Views 2(5):31, 1979-1980. - M.K.M.

Forest Damage - Another note on the same page of the latest Environment Views announces that the Alberta Government has rejected a proposal by the Environment Council of Alberta to hold public hearings into forest damage by oil and gas companies. Environment Minister Jack Cookson claimed the government is working with the industry "to ensure everything possible is done to reduce environmental damage in the forests." - M.K.M.

Aldabra Atoll - in the southwest Indian Ocean is one of the most remarkable places in the World. Remote and inhospitable, a true desert island, it is the only island in these seas to have escaped devastation by man.

It has an enormous lagoon and spectacular coral reefs. It is a major nesting site for the Green Turtle. Many of its 200 species of plants are found nowhere else. It has the largest colony of Frigatebirds in the western Indian Ocean, and the largest number of species of seabirds. Its landbirds include the Aldabra Warbler (with only five known individuals), the Aldabra Kestrel, the Aldabra Drongo, and other endemics. And it has the last flightless bird of all the Indian Ocean islands - the White-throated Rail.

But its most astonishing animal is the Giant Land Tortoise, *Geochelone gigantea*. Aldabra has the last surviving colony of a once widespread species. Detailed surveys have revealed a population of over 150,000 individuals. In places these creatures, which may be over a metre long, reach densities of over 70 per hectare. The maximum tortoise biomass reaches 70 tonnes per square kilometre. Aldabra is not only one of the last truly wild places left on earth: it is also a scientific resource of the first magnitude.

Almost incredibly, Aldabra was threatened in 1966 with conversion into a military base. This threat was averted by the combined efforts of the Royal Society of London, the Smithsonian Institution, and the National Academy of Sciences, supported by a world-wide outcry.

Since then the Royal Society has acquired the lease, built a small research station, and has actively protected the atoll and its wildlife. Everything learned during the last ten years has supported the initial estimates of Aldabra's importance.

Now the Royal Society can continue no longer. A new charitable body, the Seychelles Islands Foundation, has been set up to take over its responsibilities. Aldabra must be preserved - in perpetuity. The Foundation is entirely dependent on the money it can raise. We estimate that an endowment of One Million Dollars is required to provide a minimum conservation presence. If the Foundation does not succeed, then there is a very real danger that within the next two or three years the atoll will have to be abandoned to the poachers and the vandals.

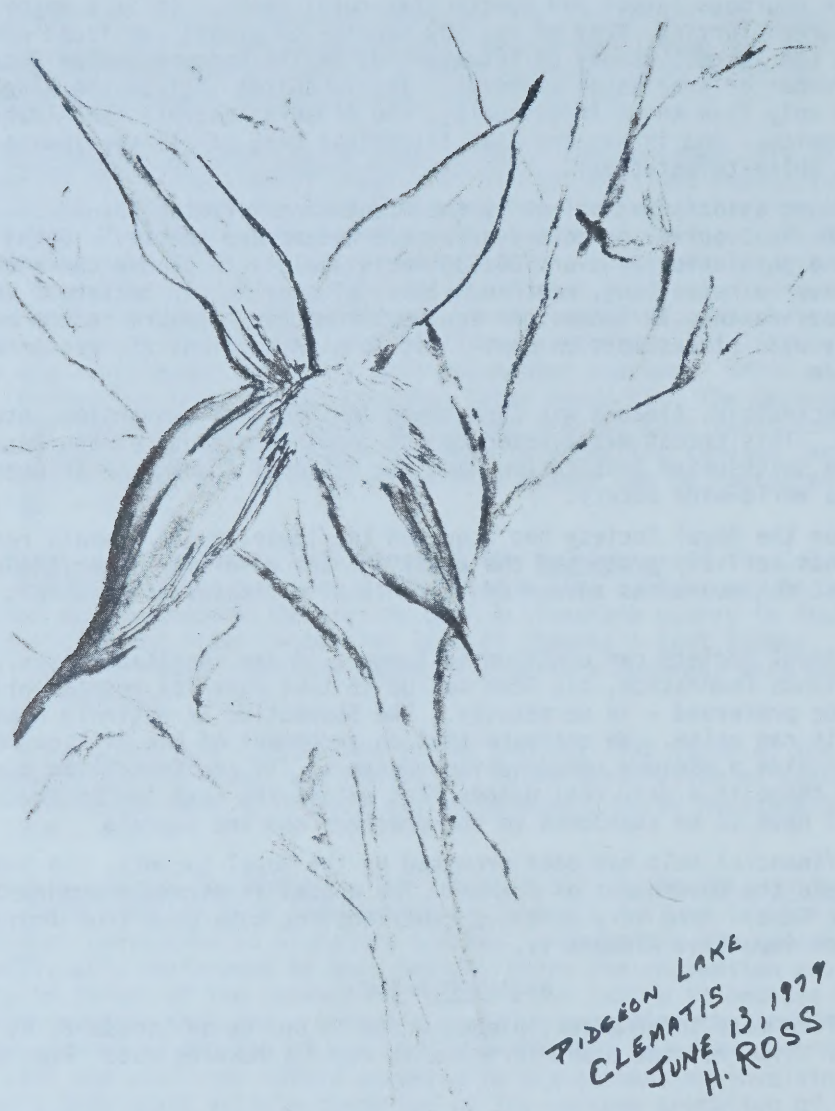
Already financial help has been promised by the Royal Society, the Smithsonian Institution, and the Government of France. The appeal is strongly endorsed by the World Wildlife Fund. Some very generous contributions have come from individuals who realise how important Aldabra is.

Will YOU help?

If you would like more information, please write to Dr. David Stoddart, at the address below. Time for the Giant Tortoise is rapidly running out. Please help *now*.

To: Dr. David Stoddart, Appeal Committee for the Seychelles Islands Foundation
c/o The Royal Society, 6 Carlton House Terrace, LONDON, SW1Y 5AG, England.

Who Should Own Natural Land? - Mrs. Helen F. Graham of Lethbridge sent the Editor an article from the December 1978 issue of "Yankee," pp.110-117 by John N. Cole, entitled "This land is my land - this land is your land." Mr. Cole describes his frustration in working on having various parcels of land acquired by public agencies for preservation, only to have the public abuse them. Mr. Cole now feels that efforts are better spent in educating landowners to the values of preserving nature on their private land. Such people often write their wills in such a way that the land must be preserved by their private or public heirs. Also private landowners are often far more strict at enforcing their rules than public agencies can be. The thought is not totally new, but should be borne in mind whenever conservationists are deciding the best strategy to preserve a particular piece of land - M.K.M.



REQUEST FOR INFORMATION

Data on American Robin Needed

1980 is the last of a three-year survey being conducted on the American Robin (*Turdus migratorius*) across North America by Rev. R. Charles Long.

Data are particularly requested for 1978-1980, but any data you have in your notes for any year may be useful, as Rev. Long is writing a monograph on this species.

Although all types of data will be useful, the following are particularly needed, preferably for 1978-1980, but if you do not have data for 1978 or 1979, a special effort to record the following in 1980 will be appreciated:

A. For each of the years 1978-1980

1. Arrival and departure dates.
   Arrival and departure dates for the majority of birds.
   Arrival of females.

2. First and last dates for nesting beginning or completion.
   First and last dates for first egg laid, and/or clutch completion.
   Size of clutch.
   Last date for last clutch completion, indicating whether 2nd or 3rd brood.
   Latest dates for young in the nest.

B. 1. Your average arrival and departure dates, giving the number of years recorded.
2. Earliest and latest arrival dates in spring.
3. Earliest and latest departure dates in the fall.

If you have information on different locations or different sites within one location, please indicate.

Send these data to:

Rev. R. Charles Long
Research Associate
Department of Ornithology
Royal Ontario Museum
Toronto, Ontario M5S 2C6

JUNIOR NATURALISTS' SECTION

PEREGRINE FALCON

by Danny Kueber

(Gr. 5)

In this essay I will describe the Peregrine Falcon, tell where it lives, if it migrates and where, how many eggs are laid and the colour of them, the food it eats, why it is endangered, how to preserve it, a personal experience and if it's used for falconry and why.

The Peregrine Falcon or "Duck Hawk" as it is often called is one of the best known falcons, and falconers use it primarily. It is fifteen to nineteen inches long and has up to a forty-three inch wingspread. The female is bigger than the male. Falcons are greyish-blue on their backs, wings and tail. The throat and upper stomach are creamy white, changing to pink with black markings on the lower parts. The falcon also has a heavy black moustache and has a dark crown, hind neck and face.

The Peregrine Falcon breeds in North America from Baffin Island to Alaska and Tennessee to Mexico. They migrate to the west coast and to the United States of America. In Alberta they live in the Rocky Mountains, in bushland; they also live in the parkland area with a few in the prairie.

The falcon lays two to six eggs which are reddish brown in colour. They are laid in a scoop-shaped nest, which is in dirt or sand on a cliff ledge, usually near water.

The falcon is one of the fastest birds, and that is why falconers use them. The Peregrine may reach the speed of two hundred miles per hour when it is diving. It kills its prey in mid-air. The falconer ties a string on the falcon's leg so the falcon can't get away.

The falcon eats pheasants, pigeons, grouse, rabbits, rodents and ducks. The falcon eats mostly birds, but does not endanger any species of bird by doing this.

The Peregrine Falcon is endangered because of chemicals, one of which is called DDT. The chemical is sprayed so that it kills bugs, and birds which eat bugs get the chemical in them. Then, when the falcon eats the bird he gets the chemical in him; it causes the eggshells to become very thin and then the weight of the sitting bird breaks the egg. When one Peregrine Falcon dies there is no other falcon to take its place.

The falcon could be preserved by making people stop using DDT; they could find some other chemical that they could use that doesn't harm animal life. People could make more bird sanctuaries for the falcon and other birds that are becoming extinct. In the sanctuaries they could help the falcon by keeping it away from chemicals and feed it animals that don't have the poisonous chemical in them. If this happens then the falcon's egg will not be so thin that they will not break, and then when the babies have grown up they can let them go. There is a place like this in Wainwright, Alta.

I have had no personal experiences with the Peregrine Falcon, but I would have liked to. I have seen it on T.V. and hope its population increases, so that I might have the chance to see one.

References

Falcons and eagles of Alberta, Alberta Lands and Forests. Peregrine Falcon - pamphlet.

THE ROCKY MOUNTAIN LION

by Leanne Hurl

(Gr. 5)

The Rocky Mountain Lion is called by many different names: cougar, panther, mountain lion, puma, and many more. In our area it is most often called the cougar.

In the past, cougars lived in many different places, from jungles to mountains wherever deer, its main food, was found. As white men came, the cougars moved deeper into the woods. There have been enough sightings to say that there are some cougars in almost all the provinces of Canada. The eastern cougar is in danger of extinction. They are more common in western Canada. In Alberta they are found mainly in parks and forest reserves. The largest numbers in Canada are found on Vancouver Island. The population of the cougar is becoming smaller because man is moving farther into the wilderness.

In 1912, Charles Moody described the cougar as "a mixture of courage and cowardice, boldness and shyness, wisdom and foolishness." People have used words like mysterious, shy, secretive, elusive, graceful, curious, and misunderstood to describe the cougar.

The cougar is the largest of all American cats. He has a long, large,

powerful body which is adapted to stalking and leaping. He can kill prey as large as a moose. An adult mountain lion is a grey or reddish yellow (tawny) colour. The throat and insides of the legs and stomach are white. The tip of his tail is black. The average male weighs about fifty-six kilograms (two hundred and ten pounds). The female averages forty-five kilograms (one hundred pounds). He usually travels in the night and is seldom seen. His voice is not very often heard, but he has many different sounds - purrs, mews, spits, growls, and a soft shrill whistle, as well as a long drawnout piercing scream, usually heard during mating season. The cougar eats what he is able to find, anything from a moose to a snowshoe hare, from a Blue Grouse to a beaver. Scientists have reported finding porcupine quills in the stomach of cougars. Very few people have seen a cougar make a kill. He stalks his prey and leaps on to its shoulders and neck, breaking its neck and causing instant death. A cougar may kill up to fifty deer per year, but this does not make the number of deer dangerously low. This helps keep the number of deer in line with the food available, by killing weakened animals.

When a female is two to three years old, she attracts a male by her smell or by her scream. There are two to four kittens in a litter. At birth, they are about one-third of a meter long and weigh about one half a kilogram. Their eyes open in ten to fourteen days. A cougar kitten is a fluffy bundle of wooly, spotted fur with a striped tail. They are rough, playful kittens and are weaned at about three months. The kittens follow their mother and learn to hunt until they are about twenty-two months old and then they go out on their own.

These young animals cause most of the problems to the livestock industry. Sheep and young calves are easy to catch. These livestock losses are usually caused by poor management or closeness of the farm or ranch to "cougar country."

In the past cougars have been hated, envied, feared and killed, whenever possible. Scientists paid no attention to them because they were expensive and hard to study. At present, they are not treated so harshly. Scientists realize that predators have an important place in the balance of nature. They are seen as a trophy animal. The general public appreciates nature more today than in the past. There is hope that the "Rocky Mountain Lion" will never become extinct.

OVERHEARD

"It is unlikely that the earliest people, caught between hunger and fear, thought much, if at all, about their role in nature. But with the sense of security and satisfaction that came as their herds grew, and then their farms, they had time to consider the fact that they were now preeminent among the creatures of the world. With the refinement of civilization, this idea swelled into arrogance, and now people were able to convince themselves that there was no other purpose for the rest of creation but to serve them and their needs."

- The Endangered Ones,
by James A. Cox, 1975.

- submitted by Murray A. Tozer

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OVERHEARD

The Modern Way

"Americans who have spent five generations learning first to conquer nature and then to ignore it could hardly be expected to interact harmoniously with a natural world they see primarily as space for mechianized leisure."

- John Cole, Yankee, December 1978, pp. 114-115

- submitted by Mrs. Helen F. Graham

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